

Attachment

Description of Amendment to Application for Modification of License

1.0 OVERVIEW

Row 44, Inc. (“Row 44”) submits this amendment to the currently pending modification application (FCC File No. SES-MFS-20170221-00188) regarding its Ku-band Earth Stations Aboard Aircraft (“ESAA”) license (Call Sign E080100) for the purposes of adding SES-10 (“SES-10”) at 67° W.L. as an additional point of communication. Row 44 seeks these modifications subject to all terms and conditions set forth in its current license¹ and the operations proposed are consistent with the technical specifications set forth in Schedule B of the pending modification application. Operations using SES-10 would use both the TECOM Ku-Stream (SAA/Remote 2) and QEST Q050000 (GSAA/Remote 3) antennas. The Schedule B reflects only the changed or additional information relevant to this amendment, and does not recapitulate the technical data supplied in the underlying application.

2.0 ADDITIONAL POINT OF COMMUNICATION REQUESTED

The addition to the Row 44 license of authority to communicate using SES-10 will provide replacement capacity for AMC-3, which was previously used at this location pursuant to Row 44’s existing license, and AMC-6, which has been used since December 2016 at this location under Special Temporary Authority, thereby allowing Row 44 to continue offering in-flight Wi-Fi connectivity to airline passengers on flights operating over North America. The Commission has granted a request to place SES-10 (S2950) on the Ku-band Permitted Space Station List (SAT-PPL-20160117-00005), and complete technical information for this space station is therefore a matter for record before the Commission. Row 44 anticipates seeking special temporary authority to permit it to commence service using SES-10 in the near future.

3.0 COORDINATION CERTIFICATION [47 C.F.R. § 25.227(b)(2)]

Row 44’s intended operations are within the scope that each operator of the requested target satellites has coordinated with the adjacent satellite operators, and should not cause harmful interference into adjacent satellites operating in accordance with FCC’s two-degree spacing policy. Exhibit A attached hereto is a copy of the April 11, 2017 SES coordination certification letter covering Row 44’s proposed operations using SES-10.

In the event that a Ku-band NGSO FSS system is launched in the future, Row 44 would enter into coordination with the NGSO FSS system operator to establish operating parameters that permit

¹ See Row 44 Inc., Call Sign E080100, File No. SES-MFS-20150928-00635 (Sat. Div., granted August 19, 2016).

successful co-frequency sharing, and would modify its operations as necessary to effect any coordination agreement reached. Row 44 acknowledges that the Commission may condition the grant of any modified license issued to it upon a requirement that it complete such coordination at the appropriate time.

4.0 TECHNICAL DATA, LINK BUDGETS AND PREDICTED COVERAGE AREAS [47 C.F.R. § 25.227(b)(4)]

Exhibit B attached hereto includes representative link budgets and a depiction of the geographic coverage contours for operations using SES-10 at 67° W.L.


5.0 REVISED SPACECRAFT, FREQUENCY & BEAM COVERAGE


[See Next Page]

**Table 1: Spacecraft, Frequency & Beam Coverage Table
 (All Provide Some Coverage to U.S. Locations)**

Satellite	Location	Beam Coverage Area	Tx (GHz)	Rx (GHz)	Satellite Operator
AMC-1	129.15 W	North America, Central America and Pacific	14.05-14.47	11.7-12.2	SES
AMC-2	84.85 W	North America, Caribbean and North Atlantic	14.05-14.47	11.7-12.2	
AMC-3	72.0 W	North America, Central America, Atlantic and Caribbean	14.05-14.47	11.7-12.2	
AMC-9	83.0 W	North America, Caribbean, Central America and North Atlantic	14.05-14.47	11.7-12.2	
SES-1	101.0 W	North America, Central America, Pacific and Caribbean	14.05-14.47	11.7-12.2	
SES-10	67.0W	North America, Central America, South Atlantic and Caribbean	14.05-14.47	11/7-12.2	
IS-29E	50.0 W	North America, Central America, South America, North Atlantic and Caribbean	14.05-14.47	10.95-11.2, 11.2-11.45, 11.45-11.7, 11.7-12.2, 12.2-12.5	Intelsat
Eutelsat 115WB*	114.9 W	North America, North Atlantic and Pacific Ocean	14.05-14.47	11.7-12.2	Eutelsat

* = Non-U.S.-licensed satellites included on Ku-band Permitted List

 = Satellite previously authorized for SAA antenna (Remote #2) at a different orbital location

 = Points of Communication Currently Authorized for SAA antenna (Remote #2)

7.0 TELEPORT UPLINK LOCATIONS

Table 2
Teleport Locations for Provision of Service within the United States

Satellite	Orbital Location	Teleport Location(s)	Site Operator	Call Sign(s)
AMC-1	129.15 W	Woodbine, VA (until May 2017) Holmdel, NJ (from May 2017)	SES Hughes	E900448 & E140054 E160163
AMC-2	80.85W	Woodbine, VA (until May 2017) N. Las Vegas, NV (from May 2017)	SES Hughes	E900448 & E140054 E940460
AMC-3	72.0 W	Holmdel, NJ	GEE/MTN	E160163
AMC-9	83.0W	North Las Vegas, NV	Hughes	E940460
SES-1	101.0W	North Las Vegas, NV	Hughes	E940460
SES-10	67.0W	Steele Valley, CA	Level 3/ Vyvx	E950202
IS-29E	50.0 W	Holmdel, NJ	GEE/MTN	E160163
Eutelsat 115WB*	114.9W	Southfield (Detroit), MI	Hughes	E990170

* = Non-U.S.-licensed satellites included on Ku-band Permitted List

7.0 LICENSEE CERTIFICATION

I, Simon McLellan, Chief Engineer of Row 44, Inc., hereby certify that Row 44, Inc. will continue to comply with the requirements of paragraphs (a)(6), (a)(9), (a)(10), and (a)(11) of Section 25.227 of the Commission's Rules and the conditions of its existing license.

s/ Simon McLellan

Simon McLellan
Chief Engineer
Row 44, Inc.

April 12, 2017